SCIENCE
Sixth Grade

LIFE SCIENCE STANDARDS

2.0 Interactions Between Living Things and Their Environment

The student will investigate how living things interact with one another and with nonliving elements of their environment.

Key	Reporting Category		PLT ACTIVITY
A	**IL**	Distinguish between commensalism, parasitism, and mutualism.	26 Dynamic Duos – p. 113
D		Distinguish between predators and prey.	25 Birds and Worms – p. 111
A	**IL**	Recognize how animals and plants are interdependent.	7 Habitat Pen Pals – p. 37 22 Trees as Habitats (part B) – p. 102 23 The Fallen Log – p. 105 26 Dynamic Duos – p. 113 47 Are Vacant Lots Vacant? – p. 200 45 Web of Life – p. 194 88 Life on the Edge – p. 382
A	**IL**	Predict whether an organism can survive in a particular ecosystem.	7 Habitat Pen Pals – p. 37 29 Rain Reasons – p. 123 31 Plant a Tree – p. 132 47 Are Vacant Lots Vacant? – p. 200
D		Interpret how humans impact ecosystems.	12 Invasive Species – p. 59 33 Forest Consequences – p. 138 71 Watch on Wetlands – p. 303 86 Our Changing World – p. 375 94 By the Rivers of Babylon – p. 411

3.0 Food Production and Energy for Life

The student will study the basic parts of plants, investigate how plants produce food, and discover that plants and animals use food to sustain life.

D		Classify organisms as producers, consumers, or decomposers.	23 The Fallen Log – p. 105 24 Nature's Recyclers – p. 108
A	**FP**	Identify how organisms obtain food for energy.	23 The Fallen Log – p. 108 26 Dynamic Duos – p. 113 28 Air Plants – p. 120 41 How Plants Grow (var.) – p. 179 45 Web of Life – p. 194
A	**FP**	Classify organisms as producers, consumers, or decomposers in a food chain or food web.	22 Trees as Habitats – p. 102 45 Web of Life – p. 194
D		Demonstrate interrelationships among organisms in a food chain or food web.	45 Web of Life – p. 194
A	**FP**	Infer the consequences of a change in the population size of an organism in a food chain or food web.	12 Invasive Species – p. 59 45 Web of Life – p. 375 86 Our Changing World – p. 375

KEY
I = Introduced D = Developing A = State Assessed M = Mastered

REPORTING CATEGORY
IL = Interaction & Environment FP = Food Production & Energy DA = Diversity & Adaptation
BC = Biological Change EU = Earth & Its Place in the Universe E = Energy

Note: "A" indicates the state curriculum (CRT) assessment only.
All the skills ("I"…"D"…"A"…"M") are addressed in the classroom assessment.

5.0 Diversity and Adaptation Among Living Things

The student will understand that living things have characteristics that enable them to survive in their environment.

D		Explain how the relationship between the form and function of an organism is associated with survival in a given environment.	10 Charting Diversity – p. 50 11 Can It Be Real? – p. 54 25 Birds and Worms – p. 111 26 Dynamic Duos – p. 113 43 Have Seeds, Will Travel – p. 185
A	**DA**	Identify adaptations that enhance the survival of organisms in an environment.	11 Can It Be Real? – p. 54 25 Birds and Worms – p. 111 26 Dynamic Duos – p. 113
A	**DA**	Determine which organisms are likely to survive in a particular environment.	7 Habitat Pen Pals – p. 37
A	**DA**	Classify plants and animals according to their features.	10 Charting Diversity – p. 50 43 Have Seeds, Will Travel – p. 185 68 Name That Tree – p. 288

6.0 Biological Change

The student will understand that living things have changed over time.

A	**BC**	Analyze how fossils provide information about the past.	N/A
A	**BC**	Differentiate between the relative age of fossils in a sedimentary rock diagram.	N/A
I		Determine the geologic age of an object using a diagram or a time line.	N/A
D		Identify additional lines of scientific evidence, other than fossils, that support the idea of change over time.	N/A
A	**BC**	Select additional lines of scientific evidence, other than fossils, that illustrate change over time.	N/A
D		Predict how a specific environmental change might affect the survival of a plant or animal species.	71 Watch on Wetlands – p. 303 86 Our Changing World – p. 375 88 Life on the Edge – p. 382
D		Evaluate possible causes of extinction.	88 Life on the Edge – p. 382
A	**BC**	Identify factors that contribute to extinction.	71 Watch on Wetlands – p. 303 80 Nothing Succeeds…. – p. 345 86 Our Changing World – p. 375 88 Life on the Edge – p. 382

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EARTH SCIENCE STANDARDS

7.0 Earth and Its Place in the Universe

The student will investigate the structure of the universe.

D		Differentiate among the components of the universe.	N/A
A	**EU**	Categorize the components of the universe (i.e., stars, planets, comets, asteroids, and meteors).	N/A
A	**EU**	Differentiate between planets according to specific characteristics.	N/A
D		Construct a model of the solar system.	N/A
D		Illustrate the positions of the Earth, moon, and sun during solar and lunar eclipses.	N/A
D		Use a model to explain how the tilt of the Earth and its revolution around the sun causes the seasons.	N/A
A	**EU**	Distinguish between a day, month, and year based on the movements of the Earth, sun, and moon.	N/A
A	**EU**	Differentiate between a solar and a lunar eclipse.	N/A
A	**EU**	Select the diagram that reflects the Earth/sun relationship that accounts for the four seasons.	N/A
D		Identify the pull of gravity as the force that holds the planets and their moons in orbit.	N/A
A	**EU**	Identify the force that pulls objects toward the Earth.	N/A
I		Relate tidal conditions with the position of the moon.	N/A
A	**EU**	.Predict the type of tide produced by the different positions of the Earth and moon system.	N/A
I		Make use of available resources (internet, library, interviews, etc.) to research careers associated with technology and space exploration.	N/A

PHYSICAL SCIENCE STANDARDS

14.0 Energy

The student will investigate energy and its uses.

D		Recognize the basic parts of a wave.	N/A
A	**E**	Identify the wavelength, frequency, and amplitude of a wave.	N/A
D		Explain how the properties of sound are related to wavelength, frequency, and amptitude.	N/A
A	**E**	Predict the direction of heat flow between objects.	N/A
I		Explain the difference between the Fahrenheit and Celsius temperature scales.	N/A
D		Explain how magnets are involved in the production of electricity.	N/A
D		Distinguish among heat, chemical, electrical, and mechanical energy.	N/A
I		Understand the law of conservation of energy.	28 Air Plants – p. 120
A	**E**	Recognize a variety of energy transformations.	N/A
A	**E**	Infer the impact of nuclear power on humans and the environment.	39 Energy Sleuths – p. 167
D		Describe the electromagnetic spectrum.	N/A
A	**E**	Select examples of refraction, reflection, and absorption of light.	N/A
I		Compare incandescent and fluorescent light with respect to production and efficiency.	N/A

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